

**WEST**[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#)[Search Form](#)[Posting Counts](#)[Show S Numbers](#)[Edit S Numbers](#)[Preferences](#)[Cases](#)**Search Results -**

Terms	Documents
L1 same (purif? or isolat? or charact?)	12

Database: US Patents Full-Text Database  
US Pre-Grant Publication Full-Text Database  
JPO Abstracts Database  
EPO Abstracts Database  
Derwent World Patents Index  
IBM Technical Disclosure Bulletins

Search:

L2

[Refine Search](#)[Recall Text](#)[Clear](#)**Search History**DATE: **Tuesday, May 20, 2003**[Printable Copy](#)[Create Case](#)

Set Name   Query  
side by side

Hit Count   Set Name  
result set

*DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ*

<u>L2</u>	L1 same (purif? or isolat? or charact?)	12	<u>L2</u>
<u>L1</u>	(phospholipase A2)	1855	<u>L1</u>

END OF SEARCH HISTORY

**WEST**

Generate Collection

Print

**Search Results - Record(s) 1 through 12 of 12 returned.**☐ 1. Document ID: US 20030040088 A1

L2: Entry 1 of 12

File: PGPB

Feb 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030040088  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030040088 A1

TITLE: Secreted protein HT5GJ57

PUBLICATION-DATE: February 27, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ruben, Steven M.	Olney	MD	US	
Komatsoulis, George	Silver Spring	MD	US	
Duan, Roxanne D.	Bethesda	MD	US	
Rosen, Craig A.	Laytonsville	MD	US	
Moore, Paul A.	Germantown	MD	US	
Shi, Yanggu	Gaithersburg	MD	US	
LaFleur, David W.	Washington	DC	US	
Ebner, Reinhard	Gaithersburg	MD	US	
Olsen, Henrik S.	Gaithersburg	MD	US	
Brewer, Laurie A.	St. Paul	MN	US	
Florence, Kimberly A.	Rockville	MD	US	
Young, Paul E.	Gaithersburg	MD	US	
Mucenski, Michael	Cincinnati	OH	US	
Endress, Gregory A.	Florence	MA	US	
Soppet, Daniel R.	Centreville	VA	US	

US-CL-CURRENT: 435/183; 435/320.1, 435/325, 435/6, 435/69.1, 530/350, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	RMK	Draw Desc	Image
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	-----	-----------	-------

☐ 2. Document ID: US 20030017500 A1

L2: Entry 2 of 12

File: PGPB

Jan 23, 2003

PGPUB-DOCUMENT-NUMBER: 20030017500  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030017500 A1

TITLE: Secreted protein HT5GJ57

PUBLICATION-DATE: January 23, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ruben, Steven M.	Olney	MD	US	
Komatsoulis, George	Silver Spring	MD	US	
Duan, Roxanne D.	Bethesda	MD	US	
Rosen, Craig A.	Laytonsville	MD	US	
Moore, Paul A.	Germantown	MD	US	
Shi, Yanggu	Gaithersburg	MD	US	
LaFleur, David W.	Washington	DC	US	
Ebner, Reinhard	Gaithersburg	MD	US	
Olsen, Henrik	Gaithersburg	MD	US	
Brewer, Laurie A.	St. Paul	MN	US	
Florence, Kimberly A.	Rockville	MD	US	
Young, Paul	Gaithersburg	MD	US	
Mucenski, Michael	Cincinnati	OH	US	
Endress, Gregory A.	Florence	MA	US	
Soppet, Daniel R.	Centreville	VA	US	

US-CL-CURRENT: 435/7.1; 530/388.15, 530/388.26

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
------	-----------	-------

☐ 3. Document ID: US 20020182652 A1

L2: Entry 3 of 12

File: PGPB

Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020182652  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020182652 A1

TITLE: Proteomic analysis

PUBLICATION-DATE: December 5, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Cravatt, Benjamin F.	La Jolla	CA	US	
Sorensen, Erik	San Diego	CA	US	
Patricelli, Matthew P.	San Diego	CA	US	
Lovato, Martha	San Diego	CA	US	
Adam, Gregory	San Diego	CA	US	

US-CL-CURRENT: 435/7.9; 436/518

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
------	-----------	-------

☐ 4. Document ID: US 20020086386 A1

L2: Entry 4 of 12

File: PGPB

Jul 4, 2002

PGPUB-DOCUMENT-NUMBER: 20020086386  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020086386 A1

TITLE: B-catenin assays, and compositions therefrom

PUBLICATION-DATE: July 4, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kamb, Carl Alexander	Salt Lake City	UT	US	
Yoo, Sanghee	Salt Lake City	UT	US	
Garcia-Guzman, Miguel	Salt Lake City	UT	US	
Pierce, Michael Leslie	Salt Lake City	UT	US	

US-CL-CURRENT: 435/183; 435/320.1, 435/325, 435/69.1, 530/350

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KIMC	Draw Desc	Image
------	-----------	-------

☐ 5. Document ID: US 20020081688 A1

L2: Entry 5 of 12

File: PGPB

Jun 27, 2002

PGPUB-DOCUMENT-NUMBER: 20020081688

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020081688 A1

TITLE: Retinoid pathway assays, and compositions therefrom

PUBLICATION-DATE: June 27, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kamb, Carl Alexander	Salt Lake City	UT	US	
Richards, Burt Timothy	Midway	UT	US	
Karpilow, Jon	Boulder	CO	US	

US-CL-CURRENT: 435/189; 435/320.1, 435/325, 435/6, 435/69.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KIMC	Draw Desc	Image
------	-----------	-------

☐ 6. Document ID: US 20020064799 A1

L2: Entry 6 of 12

File: PGPB

May 30, 2002

PGPUB-DOCUMENT-NUMBER: 20020064799

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020064799 A1

TITLE: Proteomic analysis

PUBLICATION-DATE: May 30, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Cravatt, Benjamin F.	La Jolla	CA	US	
Sorensen, Erik	San Diego	CA	US	
Patricelli, Matthew P.	San Diego	CA	US	
Lovato, Martha	San Diego	CA	US	
Adam, Gregory	San Diego	CA	US	

US-CL-CURRENT: 435/7.1; 546/339, 548/570, 568/25

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
------	-----------	-------

☐ 7. Document ID: US 20020045194 A1

L2: Entry 7 of 12

File: PGPB

Apr 18, 2002

PGPUB-DOCUMENT-NUMBER: 20020045194  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020045194 A1

TITLE: Proteomic analysis

PUBLICATION-DATE: April 18, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Cravatt, Benjamin F.	La Jolla	CA	US	
Sorensen, Erik	San Diego	CA	US	
Patricelli, Matthew P.	San Diego	CA	US	
Lovato, Martha	San Diego	CA	US	
Adam, Gregory	San Diego	CA	US	

US-CL-CURRENT: 435/7.9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
------	-----------	-------

☐ 8. Document ID: US 20020040275 A1

L2: Entry 8 of 12

File: PGPB

Apr 4, 2002

PGPUB-DOCUMENT-NUMBER: 20020040275  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020040275 A1

TITLE: Proteomic analysis

PUBLICATION-DATE: April 4, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Cravatt, Benjamin F.	La Jolla	CA	US	
Sorensen, Erik	San Diego	CA	US	
Patricelli, Matthew P.	San Diego	CA	US	
Lovato, Martha	San Diego	CA	US	
Adam, Gregory	San Diego	CA	US	

US-CL-CURRENT: 702/19; 435/7.1, 435/7.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KWIC	Draw Desc	Image
------	-----------	-------

☐ 9. Document ID: US 6534631 B1

L2: Entry 9 of 12

File: USPT

Mar 18, 2003

US-PAT-NO: 6534631

DOCUMENT-IDENTIFIER: US 6534631 B1

TITLE: Secreted protein HT5GJ57

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KMNC	Draw Desc	Image
------	-----------	-------

☐ 10. Document ID: US 5229367 A

L2: Entry 10 of 12

File: USPT

Jul 20, 1993

US-PAT-NO: 5229367

DOCUMENT-IDENTIFIER: US 5229367 A

TITLE: Antiinflammatory peptide derived from human lipocortin V

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KMNC	Draw Desc	Image
------	-----------	-------

☐ 11. Document ID: JP 07011283 A

L2: Entry 11 of 12

File: JPAB

Jan 13, 1995

PUB-NO: JP407011283A

DOCUMENT-IDENTIFIER: JP 07011283 A

TITLE: METHOD FOR PURIFYING OIL AND FAT

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KMNC	Draw Desc	Image
------	-----------	-------

☐ 12. Document ID: JP 08168390 A

L2: Entry 12 of 12

File: DWPI

Jul 2, 1996

DERWENT-ACC-NO: 1996-357246

DERWENT-WEEK: 199636

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Prepn of glyceride contg highly unsatd fatty acid in high concn - by contacting yolk phospholipid with phospholipase A2, adding glycerol to extracted fatty acid and reacting with lipase

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------

KMNC	Draw Desc	Image
------	-----------	-------

[Generate Collection](#)[Print](#)

Terms	Documents
L1 same (purif? or isolat? or charact?)	12

**Display Format:**

[Previous Page](#)

[Next Page](#)

=> d his

(FILE 'HOME' ENTERED AT 13:07:52 ON 20 MAY 2003)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 13:08:02 ON 20 MAY 2003

SEA (PHOSPHOLIPASE A2)

-----  
423 FILE ADISCTI  
34 FILE ADISINSIGHT  
1 FILE ADISNEWS  
426 FILE AGRICOLA  
114 FILE ANABSTR  
38 FILE AQUASCI  
123 FILE BIOBUSINESS  
48 FILE BIOCOMMERCE  
11172 FILE BIOSIS  
345 FILE BIOTECHABS  
345 FILE BIOTECHDS  
3156 FILE BIOTECHNO  
1152 FILE CABA  
1664 FILE CANCERLIT  
14742 FILE CAPLUS  
82 FILE CEABA-VTB  
6 FILE CEN  
30 FILE CIN  
144 FILE CONFSCI  
29 FILE CROPU  
188 FILE DDFB  
1498 FILE DDFU  
1975 FILE DGENE  
188 FILE DRUGB  
27 FILE DRUGNL  
1790 FILE DRUGU  
34 FILE DRUGUPDATES  
8 FILE EMBAL  
11205 FILE EMBASE  
501 FILE ESBIODBASE  
258 FILE FEDRIP  
1 FILE FOREGE  
63 FILE FROSTI  
9 FILE FSTA  
2064 FILE GENBANK  
2 FILE HEALSAFE  
356 FILE IFIPAT  
1010 FILE JICST-EPLUS  
12 FILE KOSMET  
2140 FILE LIFESCI  
9 FILE MEDICONF  
10187 FILE MEDLINE  
49 FILE NIOSHTIC  
72 FILE NTIS  
13 FILE OCEAN  
1626 FILE PASCAL  
68 FILE PHAR  
10 FILE PHARMAML  
29 FILE PHIN  
85 FILE PROMT  
3 FILE RDISCLOSURE  
7179 FILE SCISEARCH



10 FILE SYNTHLINE  
9242 FILE TOXCENTER  
912 FILE USPATFULL  
26 FILE USPAT2  
18 FILE VETU  
643 FILE WPIDS  
643 FILE WPINDEX  
L1 QUE (PHOSPHOLIPASE A2)  
-----

FILE 'CAPLUS, EMBASE, BIOSIS, MEDLINE, TOXCENTER, SCISEARCH, BIOTECHNO,  
LIFESCI' ENTERED AT 13:09:07 ON 20 MAY 2003

L2 1954 S L1 AND (LIPOPROTEIN)  
L3 0 S L2 AND PHOSPHOTIDYLCHOLINE  
L4 10 S L2 AND (SN-2 ESTER)  
L5 4 DUP REM L4 (6 DUPLICATES REMOVED)  
L6 618 S L2 AND (ISOLAT? OR PURIF? OR CHARACT?)  
L7 1 S L6 AND (SN-2 ESTER)  
L8 267 S L6 AND PY<1993

L8 ANSWER 264 OF 267 LIFESCI COPYRIGHT 2003 CSA

ACCESSION NUMBER: 90:65877 LIFESCI

TITLE: Enhanced binding of phospholipase-A sub(2)-modified low density **lipoprotein** by human adipocytes.

AUTHOR: Natarajan, M.K.; Fong, B.S.; Angel, A.

CORPORATE SOURCE: Rm. 7368, Med. Sci. Build., Univ. Toronto, Toronto, Ont.  
M5S 1A8, Canada

SOURCE: BIOCHEM. CELL BIOL., (1990) vol. 68, no. 11, pp.  
1243-1249.

DOCUMENT TYPE: Journal

FILE SEGMENT: M

LANGUAGE: English

SUMMARY LANGUAGE: English; French

AB Recognition of low density **lipoprotein** (LDL) by human adipocytes is not dependent on the classical LDL (apoprotein B-E) receptor. To assess whether LDL phospholipids have a role in adipocyte-LDL interactions, binding studies were carried out with human LDL modified with cobra venom phospholipase A sub(2) (PLA sub(2)) and freshly **isolated** adipocytes and **purified** adipocyte plasma membranes prepared from surgical biopsies. LDL incubated with PLA sub(2) showed increased monoacylphospholipid content, decreased diacylphospholipid content, and increased anodic migration on agarose gel electrophoresis.

L8 ANSWER 263 OF 267 LIFESCI COPYRIGHT 2003 CSA

ACCESSION NUMBER: 91:58111 LIFESCI

TITLE: **Characterization** of several phospholipase activities and diacylglycerol/2-monoacylglycerol lipases in rat alveolar macrophages.

AUTHOR: Errasfa, M.

CORPORATE SOURCE: Dep. Prev. Med., Harvard Med. Sch., Massachusetts Gen. Hosp., Boston, MA 02114, USA

SOURCE: BIOCHIM. BIOPHYS. ACTA., (1991) vol. 1085, no. 2, pp. 201-208.

DOCUMENT TYPE: Journal

FILE SEGMENT: L

LANGUAGE: English

SUMMARY LANGUAGE: English

AB We measured phospholipase activities in both the microsomal and the cytosolic enriched fractions of rat alveolar macrophages by using exogenous arachidonic acid-labeled phospholipids. The largest release of arachidonic acid from PI occurred with the cytosolic fractions at pH 6 in the presence of calcium. That hydrolysis involved a PLA sub(2), and a PLC followed by the action of a diacylglycerol and 2-monoacylglycerol lipases. The cytosol also contains a calcium-independent PLA sub(2) acting on PE.

L8 ANSWER 258 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.  
ACCESSION NUMBER: 1988:18171703 BIOTECHNO  
TITLE: Lipolysis of LDL with phospholipase A.sub.2 alters the  
expression of selected apoB-100 epitopes and the  
interaction of LDL with cells  
AUTHOR: Kleinman Y.; Krul E.S.; Burnes M.; Aronson W.; Pfleger  
B.; Schonfeld G.  
CORPORATE SOURCE: Division of Atherosclerosis and Lipid Research,  
Department of Medicine, Washington University School  
of Medicine, St. Louis, MO 63110, United States.  
SOURCE: Journal of Lipid Research, (1988), 29/6  
(729-743)  
CODEN: JLPRAW ISSN: 0022-2275  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United States  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB To assess the effects of perturbing the surface of low density  
lipoprotein (LDL) on the conformation of apoB-100, LDL (d  
1.030-1.050 g/ml) isolated from normal subjects were treated  
with phospholipase A.sub.2 (PL-A.sub.2) for 0.5 to 15 min. The resulting  
P-LDL and concurrent LDL (C-LDL) incubated without PL-A.sub.2 were  
isolated by gel permeation chromatography. Approximately 50% of  
LDL-phosphatidylcholine was hydrolyzed in 2 min and .sim.85% in 5 min.  
Lysophosphatidylcholine compounds (LPC) and free fatty acids (FFA)  
accumulated during lipolysis but most of the LPC and all of FFA could be  
removed by adding FFA-free albumin to the lipolysis mixtures.  
Immunoreactivities of P-LDL and C-LDL were evaluated in competitive  
radioimmunoassays, using a library of anti-human LDL monoclonal  
antibodies directed against the major regions of apoB-100 (the T4, T3,  
and T2 thrombin fragments). One epitope defined by monoclonal antibody  
465B6C3 and localized near the carboxyl end of the apoB-100 molecule  
became less immunoreactive (ED 50s increased); three other epitopes on  
the T2 fragment near the LDL receptor recognition site and four epitopes  
localized towards the middle (T3) and amino terminal (T4) regions did not  
change. Altered immunoreactivities were not related to LPC and FFA  
contents. Thus, the conformation of apoB-100 was selectively altered by  
phospholipolysis. The interactions of P-LDL with cultured fibroblasts  
were grossly altered: P-LDL were bound nonspecifically to fibroblasts of  
both normal and homozygous familial hypercholesterolemic subjects and  
P-LDL were not degraded. LPC and FFA retained in LDL did not explain  
these alterations, nor did changes of epitope expression near the LDL  
receptor recognition site. It is likely that the apoB-100 aberrant cell  
interaction is due to loss of surface phospholipids and 'uncovering' of  
core lipids that react nonspecifically with cell surface components.

L8 ANSWER 257 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.  
ACCESSION NUMBER: 1990:20043446 BIOTECHNO  
TITLE: Apolipoprotein C-1 inhibits the hydrolysis by  
phospholipase A.sub.2 of phospholipids in liposomes  
and cell membranes  
AUTHOR: Poensgen J.  
CORPORATE SOURCE: Grunenthal GmbH, Aachen, Germany.  
SOURCE: Biochimica et Biophysica Acta - Lipids and Lipid  
Metabolism, (1990), 1042/2 (188-192)  
CODEN: BBLA6 ISSN: 0005-2760  
DOCUMENT TYPE: Journal; Article  
COUNTRY: Netherlands  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB A small polypeptide **isolated** from human serum inhibits the action of phospholipase A.sub.2 on dipalmitoylglycerol phosphocholine vesicles. Sequence analysis revealed the protein to be apolipoprotein C-1, a major component of very light-density lipoprotein. The inhibiting efficiency is increased by one order of magnitude after 10 min preincubation of the protein with the substrate, but not the enzyme. It also depends on the concentration of the phospholipid. IC.sub.50 is about 0.5 .mu.M at 0.2 mM DPPC and 1 .mu.M at 1 mM DPPC. Apolipoprotein C-1 is also inhibitory in a more physiological system: in broken human leukemia cells (HL-60 cells) it inhibits the release by endogenous phospholipases of arachidonic acid from membrane phospholipids. The effective concentrations correspond to those found in the serum. It is concluded that apolipoprotein C-1 and similar phospholipid-binding proteins may act as phospholipase inhibitors by blocking the access to the substrate.

L8 ANSWER 254 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.  
1991:21275537 BIOTECHNO  
ACCESSION NUMBER:  
TITLE: Characterization of several phospholipase  
activities and diacylglycerol/2-monoacylglycerol  
lipases in rat alveolar macrophages  
AUTHOR: Errasfa M.  
CORPORATE SOURCE: Dept. of Preventive Medicine, Harvard Medical School,  
General Hospital, Boston, MA 02114, United States.  
SOURCE: Biochimica et Biophysica Acta - Lipids and Lipid  
Metabolism, (1991), 1085/2 (201-208)  
CODEN: BBLA6 ISSN: 0005-2760  
DOCUMENT TYPE: Journal; Article  
COUNTRY: Netherlands  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
AB We measured phospholipase activities in both the microsomal and the  
cytosolic enriched fractions of rat alveolar macrophages by using  
exogenous arachidonic acid-labeled phospholipids. The microsomal  
fractions contain a neutral calcium-independent phospholipase A.sub.2  
(PLA.sub.2) which acts on substrates phosphatidylcholine (PC) and  
phosphatidylinositol (PI), a calcium-independent PLA.sub.2 acting on  
phosphatidylethanolamine (PE), and a neutral calcium-dependent  
PI-specific PLC. The cytosolic fractions contain calcium-dependent  
phospholipases: PLA.sub.2 that hydrolyses PC at alkaline pH, and a  
neutral PI-specific phospholipase C (PLC). The largest release of  
arachidonic acid from PI occurred with the cytosolic fractions at pH 6 in  
the presence of calcium. That hydrolysis involved a PLA.sub.2, and a PLC  
followed by the action of a diacylglycerol and 2-monoacylglycerol lipases.  
The cytosol also contains a calcium-independent PLA.sub.2 acting on PE.  
Our investigation shows that rat alveolar macrophages possess a number of  
phospholipases, as well as diacylglycerol and 2-monoacylglycerol lipases.  
The above enzymes could play an essential role in the remodeling of  
membrane phospholipids in resting cells, and the generation of  
physiologically active lipids in activated cells.

L8 ANSWER 250 OF 267 SCISEARCH COPYRIGHT 2003 THOMSON ISI  
 ACCESSION NUMBER: 88:369870 SCISEARCH  
 THE GENUINE ARTICLE: P1047  
 TITLE: ENZYMATIC MODIFICATION OF LOW-DENSITY LIPOPROTEIN  
 BY PURIFIED LIPOXYGENASE PLUS  
 PHOSPHOLIPASE-A2 MIMICS CELL-MEDIATED  
 OXIDATIVE MODIFICATION  
 AUTHOR: SPARROW C P; PARTHASARATHY S; STEINBERG D (Reprint)  
 CORPORATE SOURCE: UNIV CALIF SAN DIEGO, SCH MED, DEPT MED, DIV ENDOCRINOL &  
 METAB, M-013D, LA JOLLA, CA, 92093  
 COUNTRY OF AUTHOR: USA  
 SOURCE: JOURNAL OF LIPID RESEARCH, (1988) Vol. 29, No.  
 6, pp. 745-753.  
 DOCUMENT TYPE: Article; Journal  
 FILE SEGMENT: LIFE  
 LANGUAGE: ENGLISH  
 REFERENCE COUNT: 36

L8 ANSWER 251 OF 267 SCISEARCH COPYRIGHT 2003 THOMSON ISI  
 ACCESSION NUMBER: 87:583957 SCISEARCH  
 THE GENUINE ARTICLE: K4290  
 TITLE: ENZYMATIC MODIFICATION OF LOW-DENSITY-LIPOPROTEIN  
 BY PURIFIED LIPOXYGENASE PLUS  
 PHOSPHOLIPASE-A2  
 AUTHOR: SPARROW C P (Reprint); PARTHASARATHY S; STEINBERG D  
 CORPORATE SOURCE: UNIV CALIF SAN DIEGO, LA JOLLA, CA, 92093  
 COUNTRY OF AUTHOR: USA  
 SOURCE: CIRCULATION, (1987) Vol. 76, No. 4, pp. 478.  
 DOCUMENT TYPE: Conference; Journal  
 FILE SEGMENT: LIFE; CLIN  
 LANGUAGE: ENGLISH  
 REFERENCE COUNT: No References

L8 ANSWER 252 OF 267 SCISEARCH COPYRIGHT 2003 THOMSON ISI  
 ACCESSION NUMBER: 87:502416 SCISEARCH  
 THE GENUINE ARTICLE: J8106  
 TITLE: ALPHA-LECITHIN - CHOLESTEROL ACYLTRANSFERASE DEFICIENCY -  
 LACK OF BOTH PHOSPHOLIPASE-A2 AND  
 ACYLTRANSFERASE ACTIVITIES CHARACTERISTIC OF  
 HIGH-DENSITY-LIPOPROTEIN LECITHIN - CHOLESTEROL  
 ACYLTRANSFERASE IN FISH EYE DISEASE  
 AUTHOR: HOLMQUIST L (Reprint); CARLSON L A  
 CORPORATE SOURCE: KAROLINSKA INST, KING GUSTAV V RES INST, BOX 60004,  
 S-10401 STOCKHOLM 60, SWEDEN (Reprint); KAROLINSKA INST,  
 DEPT INTERNAL MED, S-10401 STOCKHOLM 60, SWEDEN;  
 KAROLINSKA HOSP, S-10401 STOCKHOLM 60, SWEDEN  
 COUNTRY OF AUTHOR: SWEDEN  
 SOURCE: ACTA MEDICA SCANDINAVICA, (1987) Vol. 222, No.  
 1, pp. 23-26.  
 DOCUMENT TYPE: Article; Journal  
 FILE SEGMENT: LIFE; CLIN  
 LANGUAGE: ENGLISH  
 REFERENCE COUNT: 12

L8 ANSWER 253 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.  
 ACCESSION NUMBER: 1991:21310648 BIOTECHNO  
 TITLE: Factors affecting the ability of  
 glycosylphosphatidylinositol-specific phospholipase D  
 to degrade the membrane anchors of cell surface  
 proteins  
 AUTHOR: Low M.G.; Huang K.-S.  
 CORPORATE SOURCE: Rover Physiology Laboratories, Department of  
 Physiology, College of Physicians, New York, NY 10032,

SOURCE: United States.  
Biochemical Journal, (1991), 279/2 (483-493)  
CODEN: BIJOAK ISSN: 0264-6021  
DOCUMENT TYPE: Journal; Article  
COUNTRY: United Kingdom  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB Mammalian serum and plasma contain high levels of glycosylphosphatidylinositol-specific phospholipase D (GPI-PLD). Previous studies with crude serum or partially purified GPI-PLD have shown that this enzyme is capable of degrading the GPI anchor of several purified detergent-solubilized cell surface proteins yet is unable to act on GPI-anchored proteins located in intact cells. Treatment of intact ROS17/2.8, WISH or HeLa cells (or membrane fractions prepared from them) with GPI-PLD purified from bovine serum by immunoaffinity chromatography gave no detectable release of alkaline phosphatase into the medium. However, when membranes were treated with GPI-PLD in the presence of 0.1% Nonidet P-40 substantial GPI anchor degradation (as measured by Triton X-114 phase separation) was observed. The mechanism of this stimulatory effect of detergent was further investigated using .cents..sup.3H!myristate-labelled variant surface glycoprotein and human placental alkaline phosphatase reconstituted into phospholipid vesicles. As with the cell membranes the reconstituted substrates exhibited marked resistance to the action of purified GPI-PLD which could be overcome by the inclusion of Nonidet P-40. Similar results were obtained when crude bovine serum was used as the source of GPI-PLD. These data indicate that the resistance of cell membranes to the action of GPI-PLD is not entirely due to the action of serum or membrane-associated inhibitory factors. A more likely explanation is that, in common with many other eukaryotic phospholipases, the action of GPI-PLD is restricted by the physical state of the phospholipid bilayer in which the substrates are embedded. These data may account for the ability of endothelial and blood cells to retain GPI-anchored proteins on their surfaces in spite of the high levels of GPI-PLD present in plasma.

L8 ANSWER 254 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.  
ACCESSION NUMBER: 1991:21275537 BIOTECHNO  
TITLE: Characterization of several phospholipase activities and diacylglycerol/2-monoacylglycerol lipases in rat alveolar macrophages  
AUTHOR: Errasfa M.  
CORPORATE SOURCE: Dept. of Preventive Medicine, Harvard Medical School, General Hospital, Boston, MA 02114, United States.  
SOURCE: Biochimica et Biophysica Acta - Lipids and Lipid Metabolism, (1991), 1085/2 (201-208)  
CODEN: BBLLA6 ISSN: 0005-2760  
DOCUMENT TYPE: Journal; Article  
COUNTRY: Netherlands  
LANGUAGE: English  
SUMMARY LANGUAGE: English

AB We measured phospholipase activities in both the microsomal and the cytosolic enriched fractions of rat alveolar macrophages by using exogenous arachidonic acid-labeled phospholipids. The microsomal fractions contain a neutral calcium-independent phospholipase A.sub.2 (PLA.sub.2) which acts on substrates phosphatidylcholine (PC) and phosphatidylinositol (PI), a calcium-independent PLA.sub.2 acting on phosphatidylethanolamine (PE), and a neutral calcium-dependent PI-specific PLC. The cytosolic fractions contain calcium-dependent phospholipases: PLA.sub.2 that hydrolyses PC at alkaline pH, and a neutral PI-specific phospholipase C (PLC). The largest release of arachidonic acid from PI occurred with the cytosolic fractions at pH 6 in the presence of calcium. That hydrolysis involved a PLA.sub.2, and a PLC followed by the action of a diacylglycerol and 2-monoacylglycerol lipases. The cytosol also contains a calcium-independent PLA.sub.2 acting on PE.



Our investigation shows that rat alveolar macrophages possess a number of phospholipases, as well as diacylglycerol and 2-monoacylglycerol lipases. The above enzymes could play an essential role in the remodeling of membrane phospholipids in resting cells, and the generation of physiologically active lipids in activated cells.

L8 ANSWER 255 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.  
 ACCESSION NUMBER: 1991:21212993 BIOTECHNO  
 TITLE: Conversion of pig pancreas phospholipase A.sub.2 by protein engineering into enzyme active against Escherichia coli treated with the bactericidal/permeability-increasing protein  
 AUTHOR: Weiss J.; Wright G.; Bekkers A.C.A.P.A.; Van den Bergh C.J.; Verheij H.M.  
 CORPORATE SOURCE: Dept. of Microbiology/Medicine, New York University, School of Medicine, New York, NY 10016, United States.  
 SOURCE: Journal of Biological Chemistry, (1991), 266/7 (4162-4167)  
 CODEN: JBCHA3 ISSN: 0021-9258  
 DOCUMENT TYPE: Journal; Article  
 COUNTRY: United States  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English

AB Phospholipases A.sub.2 (PLA-2) are conserved enzymes that can vary widely in their activity toward certain biological targets. Activity of PLA-2 toward Escherichia coli treated with the bactericidal/permeability-increasing protein (BPI) of granulocytes has been detected only in "Group II" PLA-2 (lacking Cys.sup.1.sup.1-Cys.sup.7.sup.7) and correlates with overall basicity and the presence of a cluster of basic amino acids within a variable surface region near the NH.sub.2 terminus (including residues 6, 7, 10, 11, and 15). We now show that of five pancreatic PLA-2 ("Group I" enzymes) tested from different species of mammals, the human enzyme that is most basic both globally (pI 8.7) and locally (Arg-6, Lys-7, and Lys-10) is active toward BPI-treated E. coli (.sim.1-2% activity of the most active Group II PLA-2) whereas the other four PLA-2 are essentially inactive (<0.1%). The cDNA of the pig pancreatic PLA-2 (pI 6.4; Arg-6, Ser-7, Lys-10) has been modified by site-specific mutagenesis and the wild-type and mutant PLA-2 have been expressed in and purified from either E. coli or Saccharomyces cerevisiae to determine more precisely the structural determinants of PLA-2 activity toward BPI-treated E. coli. The single substitution of lysine (or arginine) for Ser-7 transformed the pig pancreatic PLA-2 into an active enzyme toward BPI-treated E. coli possessing 25-50% the activity of the human PLA-2. Additional modifications to increase global basicity (increase in net charge up to +4) caused a further (up to 2-fold) increase in activity. All mutant PLA-2 still containing Ser-7 possessed little or no activity toward BPI-treated E. coli. Changes in activity toward BPI-treated E. coli were accompanied by parallel changes in enzyme binding to this target. In contrast, substitution of lysine (or arginine) for Ser-7 caused little or no alteration of enzyme activity toward either autoclaved E. coli or egg yolk **lipoproteins** indicating no major effects on the catalytic properties of the PLA-2. This study demonstrates directly the role of NH.sub.2-terminal basic residues in the action of PLA-2 on BPI-treated E. coli and suggests that these properties mainly facilitate PLA-2 binding to this biological target.

L8 ANSWER 256 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.  
 ACCESSION NUMBER: 1991:21064584 BIOTECHNO  
 TITLE: Behaviour of phospholipase modified-HDL towards cultured hepatocytes. II. Increased cell cholesterol storage and bile acid synthesis  
 AUTHOR: Collet X.; Vieu C.; Chap H.; Perret B.-P.  
 CORPORATE SOURCE: INSERM Unite 326, Hopital Purpan, 31059 Toulouse Cedex,

France.  
SOURCE: Biochimica et Biophysica Acta - Lipids and Lipid  
Metabolism, (1991), 1081/2 (211-219)  
CODEN: BBLA6 ISSN: 0005-2760  
DOCUMENT TYPE: Journal; Article  
COUNTRY: Netherlands  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
AB Human total HDL (hydrated density 1.070-1.210), HDL.sub.2 (1.070-1.125),  
HDL.sub.3 (1.125-1.210) or HDL separated by heparin affinity  
chromatography were treated with or without **purified**  
phospholipase A.sub.2 from Crotalus adamanteus. Control and treated HDL  
were reisolated and were then incubated with cultures hepatocytes. 1.  
Mass measurements evidenced a time-dependent cholesterol enrichment in  
hepatocytes cultured in the absence of **lipoproteins**. Addition  
of HDL.sub.2 still enhanced by 25% the cell cholesterol content and  
down-regulated endogenous sterol synthesis in similar proportions.  
Conversely, HDL.sub.3 slightly decreased the amount of free cholesterol  
in hepatocytes (-12%). 2. Incubations with phospholipase A.sub.2-treated  
HDL resulted in a 35%-50% increase of both the cellular cholesterol  
esterification and the cholesterylester accumulation, when compared to  
cells cultured in the presence of control-HDL. This effect was observed  
with HDL.sub.2, HDL.sub.3 and combining the data with all subfractions.  
3. Cultured hepatocytes secreted cholic and .beta.-muricholic acids as  
major bile acids and HDL.sub.2 showed a tendency to stimulate their  
secretion. Phospholipase treatment of HDL again induced an increased  
production by hepatocytes of those two bile acids. Thus, whereas  
HDL.sub.2 and HDL.sub.3 display different behaviours with respect to cell  
cholesterol content, neosynthesis and bile acid secretion, their  
modifications by phospholipases always orientate the cell sterol  
metabolism in the same direction: increased cholesterylester accumulation  
and bile acid production.

L8 ANSWER 257 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.  
ACCESSION NUMBER: 1990:20043446 BIOTECHNO  
TITLE: Apolipoprotein C-1 inhibits the hydrolysis by  
phospholipase A.sub.2 of phospholipids in liposomes  
and cell membranes  
AUTHOR: Poensgen J.  
CORPORATE SOURCE: Grunenthal GmbH, Aachen, Germany.  
SOURCE: Biochimica et Biophysica Acta - Lipids and Lipid  
Metabolism, (1990), 1042/2 (188-192)  
CODEN: BBLA6 ISSN: 0005-2760  
DOCUMENT TYPE: Journal; Article  
COUNTRY: Netherlands  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
AB A small polypeptide **isolated** from human serum inhibits the  
action of phospholipase A.sub.2 on dipalmitoylglycerol phosphocholine  
vesicles. Sequence analysis revealed the protein to be apolipoprotein  
C-1, a major component of very light-density **lipoprotein**. The  
inhibiting efficiency is increased by one order of magnitude after 10 min  
preincubation of the protein with the substrate, but not the enzyme. It  
also depends on the concentration of the phospholipid. IC.sub.50 is  
about 0.5 .mu.M at 0.2 mM DPPC and 1 .mu.M at 1 mM DPPC. Apolipoprotein  
C-1 is also inhibitory in a more physiological system: in broken human  
leukemia cells (HL-60 cells) it inhibits the release by endogenous  
phospholipases of arachidonic acid from membrane phospholipids. The  
effective concentrations correspond to those found in the serum. It is  
concluded that apolipoprotein C-1 and similar phospholipid-binding  
proteins may act as phospholipase inhibitors by blocking the access to  
the substrate.

L8 ANSWER 258 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.

ACCESSION NUMBER: 1988:18171703 BIOTECHNO  
 TITLE: Lipolysis of LDL with phospholipase A.sub.2 alters the expression of selected apoB-100 epitopes and the interaction of LDL with cells  
 AUTHOR: Kleinman Y.; Krul E.S.; Burnes M.; Aronson W.; Pflieger B.; Schonfeld G.  
 CORPORATE SOURCE: Division of Atherosclerosis and Lipid Research, Department of Medicine, Washington University School of Medicine, St. Louis, MO 63110, United States.  
 SOURCE: Journal of Lipid Research, (1988), 29/6 (729-743)  
 CODEN: JLPRAW ISSN: 0022-2275  
 DOCUMENT TYPE: Journal; Article  
 COUNTRY: United States  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English

AB To assess the effects of perturbing the surface of low density lipoprotein (LDL) on the conformation of apoB-100, LDL (d 1.030-1.050 g/ml) isolated from normal subjects were treated with phospholipase A.sub.2 (PL-A.sub.2) for 0.5 to 15 min. The resulting P-LDL and concurrent LDL (C-LDL) incubated without PL-A.sub.2 were isolated by gel permeation chromatography. Approximately 50% of LDL-phosphatidylcholine was hydrolyzed in 2 min and .sim.85% in 5 min. Lysophosphatidylcholine compounds (LPC) and free fatty acids (FFA) accumulated during lipolysis but most of the LPC and all of FFA could be removed by adding FFA-free albumin to the lipolysis mixtures. Immunoreactivities of P-LDL and C-LDL were evaluated in competitive radioimmunoassays, using a library of anti-human LDL monoclonal antibodies directed against the major regions of apoB-100 (the T4, T3, and T2 thrombin fragments). One epitope defined by monoclonal antibody 465B6C3 and localized near the carboxyl end of the apoB-100 molecule became less immunoreactive (ED 50s increased); three other epitopes on the T2 fragment near the LDL receptor recognition site and four epitopes localized towards the middle (T3) and amino terminal (T4) regions did not change. Altered immunoreactivities were not related to LPC and FFA contents. Thus, the conformation of apoB-100 was selectively altered by phospholipolysis. The interactions of P-LDL with cultured fibroblasts were grossly altered: P-LDL were bound nonspecifically to fibroblasts of both normal and homozygous familial hypercholesterolemic subjects and P-LDL were not degraded. LPC and FFA retained in LDL did not explain these alterations, nor did changes of epitope expression near the LDL receptor recognition site. It is likely that the apoB-100 aberrant cell interaction is due to loss of surface phospholipids and 'uncovering' of core lipids that react nonspecifically with cell surface components.

L8 ANSWER 259 OF 267 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.  
 ACCESSION NUMBER: 1985:16194720 BIOTECHNO  
 TITLE: The degradation of platelet-activating factor in the plasma of a patient with familial high density lipoprotein deficiency (Tangier disease)  
 AUTHOR: Pritchard P.H.; Chonn A.; Yeung C.C.H.  
 CORPORATE SOURCE: Department of Pathology, Shaughnessy Hospital Lipid Research Group, The University of British Columbia, Vancouver, BC V6H 3N1, Canada.  
 SOURCE: Blood, (1985), 66/6 (1476-1478)  
 CODEN: BLOOAW  
 DOCUMENT TYPE: Journal; Article  
 COUNTRY: United States  
 LANGUAGE: English  
 AB Platelet Activating Factor (PAF) (1-O-alkyl-2-acetyl sn-glycerol 3-phosphocholine) has been characterized by its ability to aggregate platelets at low concentrations and its profound hypotensive effects. There is evidence that the rate of catabolism of this compound in the plasma regulates its concentration. In humans, we and others have

shown that a PAF acetylhydrolase is associated with low density lipoprotein (LDL). The LDL particle in the plasma of patients with Tangier disease is quite different from normal as its lipid core appears to be enriched with triacylglycerol. Thus, we have studied the potential of this abnormal lipoprotein to degrade PAF. The assay for PAF acetylhydrolase was based on the release of  $^3\text{H}$  from PAF that was labelled in the acetate moiety of the sn-2 position. Tangier disease plasma had approximately 3.3-fold higher PAF acetylhydrolase activity ( $208 \pm 9$  nmol/min/mL) than controls ( $63 \pm 18$  nmol/min/mL). This increase was brought about by an increase in the  $V_{\text{max}}$  ( $400 \pm 40$ , Tangier disease;  $54 \pm 5$ , controls) and  $K_m$  for PAF ( $120 \pm 20$   $\mu\text{mol/L}$ , Tangier disease;  $28 \pm 4$   $\mu\text{mol/L}$ , controls). The activity appears to be a specific acetylhydrolase rather than a phospholipase A<sub>2</sub> as preincubation of the substrate with 0 to 100  $\mu\text{mol/L}$  phosphatidylcholine did not affect the amount of  $^3\text{H}$  acetate released. The role of PAF, and its degradation by LDL-bound PAF acetylhydrolase in the phenotypic expression of this patient with Tangier disease, is not known. However, this is the first patient so far described who has an increased ability to degrade PAF in the plasma.